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मानक

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“जानने का अधिकार, जीने का अधिकार”

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Jawaharlal Nehru

“Step Out From the Old to the New”

IS 7348-3 (2003): Dental Vocabulary, Part 3: Dental Instruments [MHD 8: Dentistry]



“ज्ञान से एक नये भारत का निर्माण”

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“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक
दंत पारिभाषिक शब्दावली
भाग 3 दंत उपकरण
(दूसरा पुनरीक्षण)

Indian Standard
DENTAL VOCABULARY
PART 3 DENTAL INSTRUMENTS
(*Second Revision*)

ICS 01.040.11;11.060.01

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NATIONAL FOREWORD

This Indian Standard (Part 3) (Second Revision) which is identical with ISO 1942-3 : 1989 'Dental vocabulary — Part 3 : Dental instruments' issued by the International Organization for Standardization (ISO) was adopted by the Bureau of Indian Standards on the recommendations of the Dentistry Sectional Committee and approval of the Medical Equipment and Hospital Planning Division Council.

This standard was first published in 1975 as Part 2 and revised in 1982 to align it with the corresponding ISO 1942-1 : 1977 and ISO 1942-3 : 1977. Its second revision has been undertaken to adopt revised ISO 1942-3 : 1989 with a view to cover the latest terminology followed at the international level.

This standard under the general title 'Dental Vocabulary' is being published in five parts. Other parts in this series are as follows:

- Part 1 General and clinical terms
- Part 2 Dental materials
- Part 4 Dental equipment
- Part 5 Terms associated with testing

The text of ISO Standard has been approved as suitable for publication as Indian Standard without deviations. Certain conventions are, however, not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words 'International Standard' appear referring to this standard, they should be read as 'Indian Standard'; and
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

Only the English language text of the International Standard (including alphabetical index) has been adopted in this Indian Standard.

Amendments 1 and 2 of 1992 have been issued to ISO 1942-3 : 1989, adding in numerical sequence certain terms, which have been included in continuation of the existing text of this standard (From 3.280 onwards).

Indian Standard

DENTAL VOCABULARY

PART 3 DENTAL INSTRUMENTS

(*Second Revision*)

1 Scope

This part of ISO 1942 defines terms used in dentistry, particularly those relating to dental instruments. General and clinical terms, and terms concerning dental materials and equipment, and those terms associated with the testing of such products are incorporated in the four other parts of this International Standard.

This International Standard is intended to provide accepted definitions for a number of terms used in dentistry that could prove useful for the comprehension of documents aiming at the preparation and implementation of Standards, and to improve communication, through close cooperation with the Federation dentaire internationale, the World Health Organization and other national or international interested organizations.

2 Use of terms printed in italic typeface in definitions

A term printed in italic typeface in a definition, an example or a note has the meaning given to it in another entry of the Vocabulary, and may be found in any part of ISO 1942. The term is only printed in italic typeface the first time it occurs in each entry.

Other grammatical forms of the term, for example plurals of nouns and participles of verbs, are printed in the same way as the basic form.

3.001 dentistry¹⁾ : Science and art of preventing, diagnosing and treating diseases and malformations of and injuries to the teeth, mouth and jaws, and of replacing lost teeth and associated tissues.

3.002 dentist²⁾ : Person who after completing secondary education, or equivalent, follows a prescribed course in *dentistry*, at a recognized (or accredited) university or dental school, at the successful completion of which, he (or she) is qualified to be legally licensed (or registered) to practise dentistry, by the responsible body in the country and is capable of undertaking the prevention, diagnosis and treatment of orodental conditions at the community and individual levels by exercising independent judgement without supervision.

3.003 dental office; dental surgery : Location where dental patients are received and treated by the *dentist*.

3.004 working space of the dentist : Space organized around the *dentist* and equipped for the positioning and treatment of the patient.

3.005 dental laboratory : Workshop where technical procedures prescribed by the *dentist*, and not requiring the presence of the patient, are carried out.

3.006 dental technician³⁾ : Dental auxiliary competent to perform under the prescription of the *dentist*, the *dental laboratory* work.

3.007 orthodontics : Branch of *dentistry* concerned with the study of craniofacial growth and development, the treatment or prevention of malocclusion and other dentofacial anomalies.

3.008 periodontics; periodontia : That branch of *dentistry* concerned with the study, prevention and treatment of diseases affecting the *periodontium*.

¹⁾ The designation of "dentistry" may vary according to the usage of the term in the country concerned.

²⁾ This definition is in accordance with the WHO, CIOMS definitions of a "physician" adopted by the World Health Assembly, Geneva, April 1972. The designation of dentist and dental schools may vary according to the usage of the terms in the country concerned.

³⁾ The designation "dental technician" and his technical qualification may vary according to the countries concerned.

3.009 restorative dentistry : Comprehensive term covering dental procedures in the dentulous or partially edentulous mouth; these may include operative, endodontic, periodontic, orthodontic and prosthetic procedures.

3.010 conservative dentistry : That part of *dentistry* which is concerned with the treatment and restoration of individual teeth.

3.011 : That part of *conservative dentistry* which is concerned with the functional restoration of the tooth.

3.012 paedodontics; pedodontics/USA/ : That branch of *dentistry* which is concerned with the diagnosis, treatment and prevention of oral anomalies, conditions and injuries in children.

3.013 endodontics : That branch of *dentistry* concerned with the diagnosis and treatment of the diseases of the pulp and the contiguous periapical tissues.

3.014 prosthodontics; prosthetic dentistry : That branch of *dentistry* which is concerned with the functional and aesthetic rehabilitation of the masticatory system by artificial replacement of missing teeth and associated tissues.

3.015 dental material : Substance or combination of substances specially prepared and/or presented for the use of authorized persons in the practice of *dentistry* and/or its associated procedures.

3.016 dental equipment : Furniture, machines, apparatus and accessories thereto, specially manufactured and/or presented for the use of authorized persons in the practice of *dentistry* and/or its associated procedures.

3.017 dental instruments : Small hand-tools specially designed for use in *dentistry*.

3.018 dental product : Any product specially manufactured, prepared and/or presented for the use of authorized persons in the practice of *dentistry* and/or its associated procedures.

3.019 dental device : Any article, instrument or appliance, specially manufactured and/or presented for the use of authorized persons in the practice of *dentistry* and/or its associated procedures, which is neither a *dental material*, nor an item of *dental equipment*, nor has been made specifically for an individual patient.

3.020 dental pharmacological materials : Those *dental materials* which carry out their intended function by actively affecting, either locally or systemically, the normal physiological behaviour of the tissues or any pathological changes taking place in them, or by modifying the normal metabolism of cells or of invading micro-organisms. (Such pharmacological action may also be a secondary function of certain other dental materials.)

3.021 instrument handle : That part of an instrument designed to be held during use.

3.022 interchangeable instrument holder : Handle equipped with a retention device providing easy interchangeability of the instrument it is designed to hold.

3.023 dental mirror : Intra-oral inspection or inspection and retraction instrument generally consisting of two main, often separable parts:

- a) a handle;
- b) a mirror attached or not to a stem, the function of which is to join the handle to the mirror.

3.024 plane dental mirror : Dental mirror the reflective surface of which is flat.

3.025 concave [magnifying] dental mirror : Dental mirror the reflective surface of which is concave to produce an enlarged image of the objects observed.

3.026 double-sided dental mirror : Dental mirror where the two surfaces are reflective.

3.027 double separator mirror : Instrument comprising two mirrors joined by a stem which holds them at such a distance and direction in order that there will simultaneously be retraction of the soft tissues and observation of lingual and vestibular surfaces.

3.028 dental probe; explorer : Hand-held tactile instrument with a stem terminating in a thin working part which may be needle-like, hooked, or blunt according to the intended use.

3.029 forceps, dental extraction : Type of pincers for the extraction of teeth.

3.030 elevator, dental : Type of lever designed for use during the extraction of teeth or roots.

3.031 syndesmotome : Dental surgical instrument for cutting desmodontal fibres and detaching the alveolo-dental ligaments.

3.032 root separator : Surgical instrument specially designed for wedging apart the roots of a multiradicular tooth.

3.033 teeth separator : Instrument or device used to move adjacent teeth out of normal contact.

3.034 dental scaler : Hand- or power-operated dental instrument specially designed and/or presented for the removal of calculus from the surface of teeth.

3.035 spatula : Hand instrument used to mix and manipulate liquids, powders and semi-solids. The working part or blade must be non-reactive to the materials for which it is used.

3.036 hand-held cutting instruments for restorative dentistry : Instrument comprising :

- a working part or blade with a cutting edge;
- a handle by which the instrument is held and manipulated;
- a connecting part or shank which unites the handle to the blade;
- in the case of contra-angle biplane discoids, cleoids, and pear-shaped excavators, a stem connecting the blade to the shank.

3.037 straight hand-held cutting instrument : Hand-held cutting instrument, the handle, blade and shank of which are in the same axis.

3.038 curved hand-held cutting instrument : Hand-held cutting instrument, the blade of which is curved towards one of its two flat sides.

3.039 angled hand-held cutting instrument : Hand-held instrument the blade of which is at an angle to the long axis of the handle.

3.040 contra-angled hand-held cutting instrument : Hand-held cutting instrument having a long blade at a sharp angle to the long axis of the instrument, and a shank which has two or more angles or bends which bring the cutting edge within the axial projection of the handle.

3.041 hatchet : *Angled hand-held cutting instrument* the cutting edge of which is in the same plane as the long axis of the handle.

3.042 hoe : *Angled hand-held cutting instrument* the cutting edge of which is in a plane perpendicular to the long axis of the handle.

3.043 biplane curved hand-held cutting instrument : *Hatchet-type* instrument the blade of which is curved so that the concavity is on the same side of the blade as the cutting edge. Spoon, cleoid, discoid and pear-shaped hand-held cutting instruments are so called when the stem is similarly curved.

3.044 chisel : *Hand-held cutting instrument* the blade of which is rectangular in cross-section and bevelled to provide a straight cutting edge perpendicular to the long axis of the blade.

The blade is usually straight (parallelepipedic) but may be curved on the flat.

3.045 angle-forming chisel : *Chisel* the cutting edge of which is not perpendicular to the long axis of the blade.

3.046 dental excavator : *Hand-held cutting instrument* the cutting edge of which is curved.

3.047 standard position for identification of hand-held cutting instrument : Position in which an instrument should be viewed by an operator in order to identify it, namely with its handle towards the operator and its working part upwards.

3.048 left : Classifies a *hatchet-type* instrument the cutting edge of which is on the left side of the blade when the instrument is viewed in the standard position.

Also classifies an angle-forming straight chisel instrument the acute angle of which is on the left side of the blade and the bevel of which is on the far side of the blade when the instrument is viewed in the standard position.

3.049 right : Classifies a *hatchet-type* instrument, the cutting edge of which is on the right side of the blade when the instrument is viewed in the standard position.

Also classifies an angle-forming straight chisel instrument the acute angle of which is on the right side of the blade and the bevel of which is on the far side of the blade when the instrument is viewed in the standard position.

3.050 distal : Classifies a *hoe-type* instrument the cutting edge of which is on the far side of the blade when viewed in the standard position.

Also classifies a gingival margin trimmer the acute angle of which is on the far edge of the blade when viewed in the standard position.

3.051 proximal; mesial : Classifies a *hoe*-type instrument the cutting edge of which is on the near side of the blade when viewed in the standard position.

Also classifies a *gingival margin trimmer* the acute angle of which is on the far edge of the blade when viewed in the standard position.

3.052 spoon excavator : *Dental excavator* the blade of which is curved so that the cutting edge is on the concave side of the blade.

The cross-section of the blade is approximately semi-circular.

3.053 pear-shaped excavator : Curved *dental excavator* the blade of which has a pear-shaped profile and is joined to the shank at its narrowest portion.

3.054 cleoid excavator : *Dental excavator* the blade of which is pointed and approximately triangular in cross-section, and has two cutting edges.

3.055 discoid excavator : *Dental excavator* the blade of which is a segment of a sphere with a circumferential cutting edge.

3.056 gingival margin trimmer : Biplane-angle-forming *chisel*.

3.057 slip-joint : Device for coupling the drive-shaft to the handpiece, consisting of two co-axial cylinders slipped one upon the other and secured by a retaining device.

3.058 wrist-joint : System consisting of hinges, rotating joints and pulleys, which allows the rotary movement to be transmitted through a cord drive to a freely movable *slip-joint*.

3.059 externally locking slip-joint : Slip-joint characterized by an external locking device intended to engage in a slot in the proximal part of the body of the handpiece where it locks in a groove adjacent to and in line with the slot.

3.060 internally locking slip-joint; connection to micromotor : Slip-joint in which the retention of the *handpiece* is effected by means of a retractable bolt projecting from the internal cylinder and intended to engage in an annular groove machined in the inside of the proximal part of the dental handpiece.

NOTE — This joint permits rotation of the handpiece on the micromotor.

3.061 handpiece, dental (general term) : Hand-held tool holder designed to transmit with or without transformation the energy necessary for the operation of dental tools or instruments.

3.062 dental handpiece for rotary movement : *Dental handpiece* designed to transmit or transform rotary movements.

NOTE — Most of these are designed as short tool holders to be directly coupled to a dental electric or air-driven micromotor. Such a formed unit may be considered as the handpiece, and can even be an integrated device comprising a micromotor, the transmission and the chuck. Dental handpieces may be fitted with air and water ducts to cool and/or clean the operating field and or fibre optics to illuminate it.

3.063 handpiece, straight : Handpiece designed to transform and/or transmit rotary movements to a tool, the axis of which coincides with the main axis of the handpiece.

3.064 handpiece, angled (general term) : Handpiece of which the main axis is at an angle with that of the instrument or tool which it carries.

3.065 handpiece, obtuse-angled : Mono-angled handpiece of which the main axis is at an obtuse angle with that of the instrument or tool which it carries.

3.066 handpiece, right-angled : Mono-angled handpiece of which the main axis is at a right angle with that of the instrument or tool which it carries.

3.067 handpiece, contra-angled : *Right-angled handpiece* with one or more additional angles so placed as to bring the working part of the instrument or tool approximately into line with the main axis of the handpiece.

3.068 handpiece, contra-angled, adjustable : Type of *contra-angled handpiece* in which that part carrying the right-angled head can be rotated about its own axis.

3.069 right-angled head : Distal part of a *handpiece* which retains and/or drives the instrument at right-angles to the long axis of the neck of the handpiece.

3.070 neck of a dental handpiece : That part of an *angled handpiece* which unites the head to the body (or handle).

3.071 handpiece, adjustable, angled : Type of *angled handpiece* in which the angle of the neck to the body can be changed.

3.072 miniature right-angled head : *Right-angled head* of small dimensions specially designed to accommodate miniature burs.

3.073 handpiece, endodontic : Type of *contra-angled handpiece*, for use in *endodontics*, designed to transform a continuous rotary movement into an alternate semirotary one and/or axial alternate movement, irrespective whether they are combined or not.

3.074 handpiece, Doriot type : *Straight handpiece* with an integral *wrist-joint*. At its proximal end it has a knurled button for securing, by means of a chuck, instruments or specially designed angled heads.

3.075 micromotor, dental : Small motor, electric or air driven, which is directly coupled to or an integral part of the handpiece.

3.076 air turbine, dental : Air-driven high-speed small turbine which is designed to be integrated into the head of a *dental handpiece*. The chucking device is co-axial to the turbine.

3.077 miniature dental air turbine : Small *dental air turbine*, the head of which is designed to accommodate miniature FG burs.

3.078 friction grip shank of a rotary instrument (FG) : Shank designed to fit into a friction grip chuck.

3.079 friction grip chuck of a rotary handpiece : Tool holder in which instrument fixation, centring and driving are achieved through deformation of an elastic system when the instrument shank is inserted.

3.080 latch-type retainer : Device designed to retain rotary instruments by engaging the groove in the instrument shank.

3.081 latch-type shank : Rotary instrument shank having an annular groove for retention by a *latch-type retainer* and a flat which engages the driving component of the *handpiece*.

3.082 rotary instrument (general term) : Hand- or power-operated instrument designed to be used with a rotary movement reversing or combined with other types of movements. It consists of a working part, sometimes called the head and a shaft. The rotary movement may be complete, partial, reversing or combined with other types of movements.

3.083 shank of a rotary instrument : That part of the shaft of a rotary instrument which is designed to fit into a handpiece or other tool holder.

3.084 neck of a rotary instrument : That part of the shaft of a rotary instrument which unites the working part to the shank. It is usually tapered.

3.085 type of shank : That designation by which the shank of a rotary instrument is identified according to its shape and dimensions.

3.086 shape of the working part of a rotary instrument : Geometrical outline of the envelope of revolution described by the working part of a rotary instrument during its axial rotation.

NOTE — Where there is more than one geometrical outline produced by the rotating working part, each outline shall be successively described from the distal end.

EXAMPLES

Domed truncated conical head.

Inverted truncated conical cylindrical head.

Conical inverted hemispherical head.

Conical truncated inverted conical head.

3.087 characterization of a rotary instrument : Detailed characteristics of the working part of an instrument, for instance the number, dimensions and geometry of the blades, or the size and distribution of the abrasive particles.

3.088 burnisher : Hand or rotary instrument with a smooth or ribbed working head used for the cold working of metal surfaces in order to produce a bright smooth finish and/or for the spinning of thin metallic margins at the cavo-surface angle.

3.089 drill : Boring instrument.

3.090 scaler, rotary :¹⁾

3.091 spear drill :¹⁾

3.092 twist-drill :¹⁾

3.093 drill, countersinking cylindrical, with guide :¹⁾

3.094 drill, countersinking conical :¹⁾

3.095 cutter, tubular windowed :¹⁾

3.096 cutter, tubular, truncated, conical :¹⁾

3.097 trephine windowed :¹⁾

3.098 trephine with circular window :¹⁾

3.099 head, cylindrical : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a cylinder.

¹⁾ (Term self-explanatory).

3.100 head, wheel-shaped : Cylindrical head, the length of which is approximately equal to one-third of its nominal diameter.

3.101 head, conical : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a cone, the base of which is towards the shaft.

3.102 head, conical truncated : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a truncated cone, the base of which is towards the shaft.

3.103 head, conical inverted : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a cone, the base of which is away from the shank.

3.104 head, conical inverted truncated : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a truncated cone the base of which is away from the shaft.

The length of the head and its mean diameter are approximately equal.

3.105 head, spherical; round head : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a sphere.

3.106 head, hemispherical; half-round head : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a hemisphere, the base of which is towards the shaft.

3.107 head, hemispherical inverted; inverted half-round head : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a hemisphere, the base of which is away from the shaft.

3.108 head, hypo-hemispherical : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a dome of constant curvature smaller than a hemisphere, the base of which is towards the shaft.

3.109 head, hypo-hemispherical inverted : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a dome of constant curvature smaller than a hemisphere, the base of which is away from the shaft.

3.110 head, ellipsoidal : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of an ellipsoid.

3.111 head, ellipsoidal longitudinal : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of an ellipsoid, the long axis of which coincides with the axis of rotation.

3.112 head, ellipsoidal transverse : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of an ellipsoid, the short axis of which coincides with the axis of rotation.

3.113 head, paraboloidal : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a regular parabola, the base of which is towards the shaft.

3.114 head, paraboloidal inverted : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of a regular parabola, the base of which is away from the shaft.

3.115 head, ogival : Working part describing, by rotation about the shank axis, an envelope of revolution in the shape of the one produced by the revolution of a pointed (Gothic) arch around its axis of symmetry.

3.116 head, hypo-hemispherical symmetrical; lens-shaped head : Working part describing, when rotating, a shape of a biconvex lens.

3.117 head, conico/cylindrical; pointed cylindrical head : Cylindrical head having a conical end, the base of which has the same diameter as the cylinder.

3.118 spherico/cylindrical head; round-ended cylindrical head : Cylindrical head, the end of which describes, when rotating, a spherical surface the diameter of which is greater than that of the cylindrical part.

3.119 hemispherico/cylindrical head; domed cylindrical head : Cylindrical head ending in a hemispherical dome, the radius of which is equal to that of the cylindrical part.

3.120 hypo-hemispherico/cylindrical head; round-ended cylindrical head : Cylindrical head, the end of which describes, when rotating, a spherical surface which is less than a hemisphere.

3.121 ogivo/cylindrical head; torpedo-shaped cylindrical head : Cylindrical head, the end of which describes, when rotating, a figure similar to the one produced by the revolution of a pointed (Gothic) arch around its axis of symmetry.

3.122 hollow head; cup-shaped head : Head which describes, when rotating, a surface of revolution with any profile which has a cavity open at the end.

EXAMPLES

Hollow inverted hemispherical head (cup-shaped head).

Hollow inverted truncated cone head (hollow inverted cone head).

Hollow cylindrical head.

3.123 trephine : Primarily end-cutting hollow cylindrical or truncated conical head.

3.124 shouldered head : Head having a smooth shoulder, the function of which is to limit penetration.

3.125 oval head; ovaloid head : Working part which describes, when rotating, a figure produced by the revolution, around one of its two axes of symmetry of an oval.

3.126 longitudinal oval head : Oval head the axis of rotation of which coincides with its long axis of symmetry.

3.127 transverse oval head : Oval head the axis of rotation of which coincides with its short axis of symmetry.

3.128 ovoidal head; egg-shaped head : Working part which describes, when rotating, a figure produced by the revolution, around its axis of symmetry, of an ovoid, the larger end being towards the shaft.

NOTE — An ovoid is a smooth closed curve with only one axis of symmetry. No straight line meets the curve in more than two points.

3.129 inverted ovoidal head; inverted egg-shaped head : Working part which describes, when rotating, a figure produced by the revolution, around its axis of symmetry, of an ovoid, the smaller end being towards the shaft.

3.130 spherical head with collar : Spherical head joined to a truncated conical shank the *distal* part of which also carries cutting or abrasive elements.

3.131 inverted conical head, truncated, side-cutting only : (Term self-explanatory).

3.132 inverted conical head, truncated, with collar : Inverted truncated conical head joined to a truncated conical shank the *distal* part of which also carries cutting or abrasive elements.

3.133 inverted conical head with collar : *Inverted conical head* joined to a truncated conical shank the *distal* part of which also carries cutting or abrasive elements.

3.134 inverted conical head, pointed, truncated : Head having a shape composed of two principal figures; distally a conical part joined at its base without a step to an inverted truncated conical proximal part.

3.135 inverted bell head : Head having a shape composed of two principal figures: distally a hyperboloidal part which is bitruncated and inverted joined without a step to an inverted hemispherical proximal part.

3.136 wheel head, pointed : Head having a shape composed of two principal figures: distally a cone which is united at its base without a step to a proximal part which is in the form of a wheel.

3.137 wheel head with collar : Wheel head joined to a truncated conical shank the *distal* part of which also carries cutting or abrasive elements.

3.138 wheel head, riveting : Wheel head, carrying on its rim balls or rollers for riveting.

3.139 inverted conical head, cylindrical : Head having a shape composed of two principal figures: distally an inverted conical part joined without a step to a cylindrical proximal part.

3.140 inverted conical head, truncated/ cylindrical : Head having a shape composed of two principal figures: distally an inverted truncated conical part joined with a step to a cylindrical proximal part.

3.141 lenticular head with collar : Lenticular head joined to a truncated conical shank, the *distal* part of which also carries cutting or abrasive elements.

3.142 inverted conical truncated head with concave side : Head having the shape of an inverted truncated cone, the side of which is concave.

3.143 wheel head with rounded edges : Wheel head, the axial cross-section of which is a rectangle, with rounded edges.

3.144 wheel head recessed, with convex rim : Wheel head, symmetrically recessed, the rim of which is slightly and symmetrically rounded in axial cross-section.

3.145 wheel head with rounded rim : Wheel head, the rim of which is semi-circular in axial cross-section.

shouldered : Wheel head, the rim of which is slightly and symmetrically rounded in axial cross-section with a shoulder centrally on its *distal* surface.

3.147 cylindrical head, round edged with concave end : *Cylindrical head*, approximately square in axial cross-section with a concave distal surface and with a rounded *distal* edge.

3.148 inverted conical, end cutting only :¹⁾

3.149 wheel, end cutting only :¹⁾

3.150 wheel, rim grooved perforated :¹⁾

3.151 inverted conical, side cutting only with concave end :¹⁾

3.152 wheel, peripheral cutting only :¹⁾

3.153 wheel, spoked, peripheral cutting only :¹⁾

3.154 cylindrical, side cutting only :¹⁾

3.155 cylindrical, end cutting only :¹⁾

3.156 cylindrical, end cutting and partially side cutting :¹⁾

3.157 cylindrical domed, end cutting and partially side cutting :¹⁾

3.158 truncated, conical side cutting only :¹⁾

3.159 truncated, conical, domed :¹⁾

3.160 truncated, conical, pointed :¹⁾

3.161 truncated, conical, domed, side cutting only :¹⁾

3.162 cylindrical, double domed :¹⁾

3.163 conical, with inverted conical end symmetrical :¹⁾

3.164 inverted, truncated, conical, domed :¹⁾

3.165 inverted, conical, domed :¹⁾

3.166 flame :¹⁾

3.167 bud :¹⁾

3.168 bud, slender :¹⁾

3.169 barrel :¹⁾

3.170 cylindrical, with ogival end :¹⁾

3.172 bud, rounded :¹⁾

3.173 bud, rounded, slender :¹⁾

3.174 bell :¹⁾

3.175 conical, inverted hyperboloidal, short :¹⁾

3.176 bur, dental :

(1) Rotary milling tool, consisting of a head and a shaft, designed to fit into a *dental handpiece*.

(2) Rotary milling tool, designed to fit into a *dental handpiece* and consisting of a head and a shaft.

NOTE — This term has also sometimes been incorrectly applied to small abrasive diamond instruments.

3.177 bur head : Working part of a bur.

3.178 bur head length : Axial dimension of the *bur head*.

3.179 bur shaft : *Bur*, minus its head. The shaft consists of the neck and the shank.

3.180 bur neck : Usually tapered part of the shaft of a *bur* which unites the head with the shank.

3.181 bur shank : That part of the shaft of a *bur* which fits into the handpiece-chuck.

3.182 bur, spherical : *Bur* with a spherical head.

3.183 bur, cylinder : *Bur* the head of which describes a cylindrical surface when rotating.

3.184 bur, conical truncated : *Bur* with a truncated conical head.

3.185 bur, trephine : Hollow open-ended primarily end-cutting cylindrical or truncated conical *bur*. There are usually one or more lateral openings.

3.186 bur, shouldering : Type of *cylindrical bur* the head of which carries cutting blades both on the end and on the part of the side adjacent to it.

3.187 bur, wheel : Usually *cylindrical bur* the head length of which is approximately equal to one-third of its nominal diameter.

3.188 bur, shouldered : Bur having a shoulder the function of which is to limit its penetration.

¹⁾ (Term self-explanatory).

¹⁾ (Term self-explanatory).

3.189 bur, end-cutting : Cylindrical, exclusively end-cutting *bur*.

3.190 bur, conical truncated inverted; inverted cone bur : *Bur* with an inverted truncated conical head.

3.191 bur, excavating : *Bur* specially intended for the removal of carious dentine.

3.192 bur, finishing : *Bur* with fine blades used for finishing surfaces.

3.193 bur, root-facing : *End-cutting bur* with a broad and flat end which bears cutting blades, and a smooth central guide intended to be located in the root canal during use.

3.194 bur for pulp chamber : Cylindrical or truncated conical *bur* with a domed smooth end.

3.195 circular saw bur : Disc-shaped peripheral cutting *bur*.

3.196 bur, interdental :¹⁾

3.197 bur, roughening :¹⁾

3.198 bur, spherical extra-long stem :¹⁾

3.199 root facer bur, guided :¹⁾

3.200 amalgam bur :¹⁾

3.201 bur, shouldered, countersinking cylindrical, with guide :¹⁾

3.202 root-facing bur, hemispherical, guided :¹⁾

3.203 mandrel with external thread and nut :¹⁾

3.204 mandrel with external thread :¹⁾

3.205 mandrel with internal thread and screw :¹⁾

3.206 mandrel, reinforced, with internal thread and screw :¹⁾

3.207 tapered screw chuck :¹⁾

3.208 mandrel, with pin chuck and two locating prongs :¹⁾

3.209 mandrel, split, truncated, conical :¹⁾

3.210 mandrel, split cylindrical :¹⁾

3.211 abrasive disc : *Rotary instrument* consisting of a circular flat or slightly conical sheet carrying or containing an abrasive. It is fixed or intended to be fixed at its centre to a mandrel.

Abrasive discs are distinguished

- by the shape and nature of the disc and its particular characteristics;
- by the type and quality of the abrasive;
- by the type of bond of the abrasive.

3.212 flat disc : *Abrasive disc* with a flat surface.

3.213 conical disc : *Abrasive disc* the surface of which is conical and which is mounted on the mandrel at its apex.

3.214 perforated disc : *Flat or conical disc* in which there are perforations.

3.215 tangential cutting disc : *Disc* with abrasive on its periphery.

3.216 single-sided disc : *Disc* with abrasive on one surface only.

3.217 double-sided disc : *Disc* with abrasive on both surfaces.

3.218 single-sided tangential cutting disc : *Disc* with abrasive on one side and on its periphery.

3.219 double-sided tangential cutting disc : *Disc* of which both surfaces and the periphery are abrasive.

3.220 convex disc : Single-sided *conical disc*, tangential cutting or not, of which the internal surface is not abrasive.

3.221 concave disc : Single-sided *conical disc*, tangential cutting or not, of which the external surface is not abrasive.

3.222 edge-cutting disc : Flat, *double-sided tangential cutting disc*, abrasive only on the periphery and the part adjacent to it.

3.223 circular saw : Cutting instrument consisting of a circular metallic sheet which carries teeth on its peripheral edge. Its dimensions and rigidity depend upon its intended use.

3.224 flat disc, single-sided and peripheral cutting :¹⁾

3.225 flat disc, double-sided and peripheral cutting :¹⁾

3.226 flat disc, perforated, double-sided and peripheral cutting :¹⁾

3.227 flat disc, peripheral cutting only :¹⁾

¹⁾ (Term self-explanatory).

¹⁾ (Term self-explanatory).

3.242 root-canal filling spreader : Hand instrument the working part of which is tapered, circular in cross-section and has a pointed end. It is designed to compress *filling materials* in a root canal mainly in a lateral direction.

¹⁾ (Term self-explanatory).

the long axis.

3.254 root-canal reamer, type G : Self-guiding reamer, the working part of which is flame-shaped and carries helicoidal blades. It is joined to the shank by a long neck.

3.268 bone cutter, truncated, conical, pointed :¹⁾

¹⁾ (Term self-explanatory).

in the S.F.O., has the blade directed towards the left side of the observer.

¹⁾ (Term self-explanatory).

3.288 left elevator : Elevator which, placed in the S.P.O., has the blade directed towards the right side of the observer.

3.289 description of elevator blades :

(1) The shape can be ogival, triangular or tapered.

(2) The cross-section can be rectangular, or lenticular (bi-convex), plano-convex (cavo-convex) or semi-circular.

3.290 endodontic absorbent point; paper point : Slender cone made of an absorbent material (usually paper) and designed to absorb liquids in root canal therapy.

3.291 endodontic obturating point : Slender cone, of convenient shape and size, designed for use in the permanent filling of a root canal.

3.292 endodontic gutta-percha point : Endodontic obturating point the main component of which is gutta-percha.

3.293 endodontic silver point : Endodontic obturating point made of silver.

3.294 endodontic polymeric point : Endodontic obturating point the main component of which is synthetic polymers.

3.295 band pusher : Hand instrument designed for positioning and adapting metal bands on teeth.

3.296 band-removing pliers : Pliers designed for removing bands from teeth.

3.297 retractor : Instrument designed to displace the soft tissues to improve visibility, access, and safety during clinical procedures.

NOTE — Retractors are classified according to the tissue concerned, e.g. cheek, lip, flap, tongue, tissue retractors etc.

3.298 dental amalgam carrier : Instrument specially designed to collect, transport and deposit amalgam in a plastic state into prepared cavities.

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